



# HITACHI

## SERVICE MANUAL

**YK****No.0236E****CT7880B/K****R/C:CLU-490IR****NTSC****G7LXU2 Chassis**

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**CAUTION:** Before servicing this chassis, it is important that the service technician read the "Safety Precaution" and "Product Safety Notices" in this Service Manual.

### TECHNICAL SPECIFICATIONS

ANTENNA INPUT IMPEDANCE .....	75Ω (300Ω)	POWER INPUT .....	AC120V 50/60Hz
CHANNEL COVERAGE		POWER RATING .....	165W
VHF BAND .....	2~13	CONVERGENCE .....	Self convergence
UHF BAND .....	14~69	FOCUS .....	Electrostatic
CATV MID BAND .....	A-5~A-1	PICTURE TUBE .....	MVA68AEC00X
A~I		SPEAKER .....	2 Woofers (60×120mm)
SUPER BAND .....	J~W	2 Tweeters (φ50mm)	
HYPER BAND .....	W+1~W+28	SOUND OUTPUT .....	5W×2
ULTRA BAND .....	W+29~W+84	DIMENSIONS	
RECEIVING CHANNEL .....	181ch	W .....	664mm
CHANNEL INDICATOR .....	DIGITAL/ON SCREEN	H .....	595mm
INTERMEDIATE FREQUENCY		D .....	518mm
Picture I-F Carrier .....	45.75MHz	WEIGHT .....	41kg
Sound I-F Carrier .....	41.25MHz		
Sound I-F .....	4.50MHz		

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT

## SOLID STATE COLOUR TELEVISION

**June 1988****YOKOHAMA WORKS**

## SAFETY PRECAUTIONS

**NOTICE:** Comply with all cautions and safety related notes located on or inside the cabinet and on the chassis or picture tube.

**WARNING:** Since the chassis of this receiver is connected to one side of AC power supply during operation, whenever the receiver is plugged in, service should not be attempted by anyone unfamiliar with the precautions necessary when working on this type of receiver.

The following precautions should be observed:

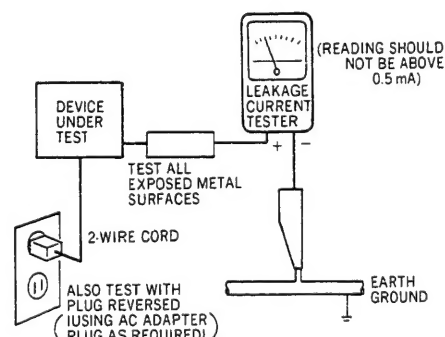
1. Do not install, remove, or handle the picture tube in any manner unless shatterproof goggles are worn. People not so equipped should be kept away while picture tubes are handled. Keep picture tube away from the body while handling.
  2. When service is required, an isolation transformer should be inserted between power line and the receiver before any service is performed on a "HOT" chassis receiver.
  3. When replacing a chassis in the receiver, all the protective devices must be put back in place, such as barriers, non-metallic knobs, adjustment and compartment covershields, isolation resistor-capacitor, etc.
  4. When service is required, observe the original lead dress. Extra precaution should be taken to assure correct lead dress in the high voltage circuitry area.
  5. Always use the manufacturer's replacement components. Especially critical components as indicated on the circuit diagram should not be replaced by other manufacturer's. Furthermore where a short circuit has occurred, replace those components that indicate evidence of overheating.
  6. Before returning a serviced receiver to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the receiver by the manufacturer has become defective, or inadvertently defeated during servicing.
- Therefore, the following checks should be performed for the continued protection of the customer and service technician.

## Leakage Current Cold Check

With the AC plug removed from the 120V AC 60Hz source, place a jumper across the two plug prongs. Turn the AC power switch on. Using an insulation tester (DC500V), connect one lead to the jumpered AC plug and touch the other lead to each exposed metal part (antennas, screwheads, metal overlays, control shafts, etc.), particularly any exposed metal part having a return path to the chassis. Exposed metal parts having a return path to the chassis should have a minimum resistor reading of 0.3 MΩ and a maximum resistor reading of 5 MΩ. Any resistor value below or above this range indicates an abnormality which requires corrective action. Exposed metal parts not having a return path to the chassis will indicate an open circuit.

## Leakage Current Hot Check

Plug the AC line cord directly into a 120V AC 60Hz outlet (do not use an isolation transformer for this check). Turn the AC power switch on. Using a "leakage Current Tester (Simpson Model 229 equivalent)", measure for current from all exposed metal parts of the cabinet (antennas, screwheads, metal overlays, control shaft, etc.), particularly any exposed metal part having a return path to the chassis, to a known earth ground (water pipe, conduit, etc.). Any current measured must not exceed 0.5mA.



## AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE RECEIVER TO THE CUSTOMER.

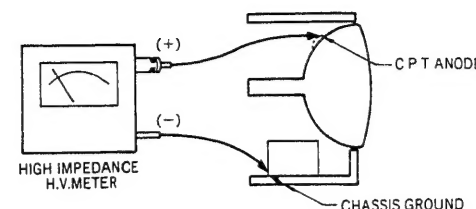
## High Voltage

This receiver is provided with a hold down circuit for clearly indicating that voltage has increased in excess of a predetermined value. Comply with all notes described in this Service Manual regarding this hold down circuit when servicing, so that this hold down circuit may correctly be operated.

## Serviceman warning

With minimum Black Level and Picture, operating high voltage in this receiver is lower than 32.0KV. In case any component having influence on high voltage is replaced, confirm that high voltage with minimum Black Level and Picture is lower than 32.0KV. To measure H.V. use a high impedance H.V. meter. Connect (—) to chassis earth and (+) to the CPT anode button. (See the following connection diagram).

**NOTE:** Turn power switch off without fail before the connection with Anode button is made.



## X-radiation

**TUBE:** The primary source of X radiation in this receiver is the picture tube. The tube utilized for the above mentioned function in this chassis is specially constructed to limit X radiation emissions.

For continued X radiation protection, the replacement tube must be the same type as the original, HITACHI approved type.

When trouble shooting and making test measurements in a receiver with a problem of excessive high voltage, avoid being unnecessarily close to the picture tube and the high voltage component.

Do not operate the chassis longer than is necessary to locate the cause excessive voltage.

## CPT Installation

Install the CPT into the cabinet as follows:

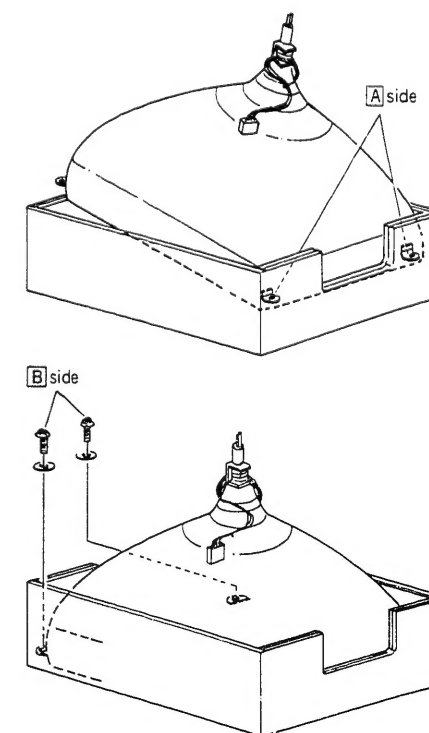
1. When inserting the CPT, tilt it at an angle to the cabinet. (Side A in the illustration)
2. Insert the other end and tighten the screws. (Side B in the illustration)

## PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in HITACHI television receiver have special safety related characteristics. These are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual. Electrical components having such features are identified by marking with a Δ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the HITACHI recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, X-radiation, or other hazards.

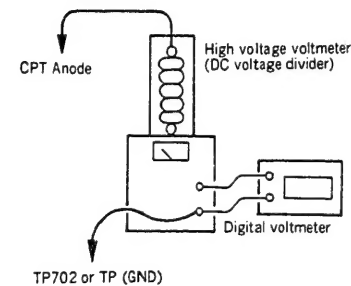
Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current HITACHI Service Manual. A subscription to, or additional copies of, HITACHI Service Manual may be obtained at a nominal charge from HITACHI SALES CORPORATION.



## TECHNICAL CAUTIONS

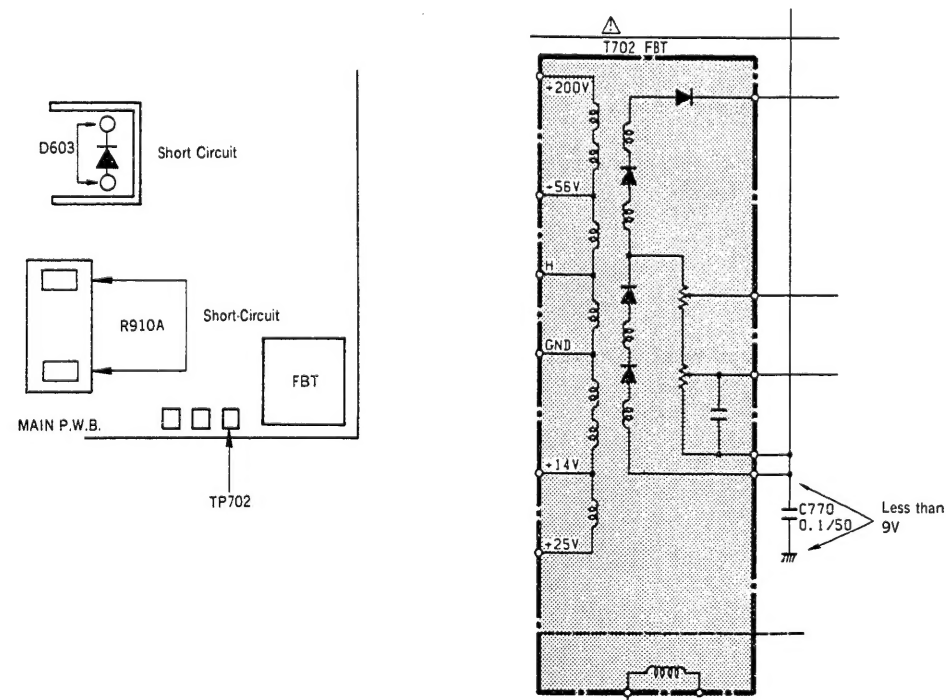
## High voltage limiter circuit operation check

1. Connect the high voltage voltmeter between the CPT anode terminal (anode cap) and ground (TP702 or TP (GND)) as shown below.
2. Set the AC input voltage to  $132 \pm 3V$ .
3. Receive the broadcast signal and set the picture level to maximum and the black level to the maximum. Adjust the screen VR and sub brightness VR so that beam current is  $1.50 \pm 0.1mA$ . (The voltage at ABL terminal of FBT between both ends of C770 — should be 9V or less at this time.)
4. Check that the constant high voltage is  $27.2kV$  at this time.
5. Set the AC input voltage to  $100 \pm 5V$  and then shortcircuit both ends of D603 and R910A.
6. Leave the settings of the picture, black level and screen VRs as in item (3) and gradually increase the AC input voltage. Check that the picture disappears when the high voltage is less than  $33.0kV$ .
7. Turn the switch of the set off immediately after checking that the picture disappears.

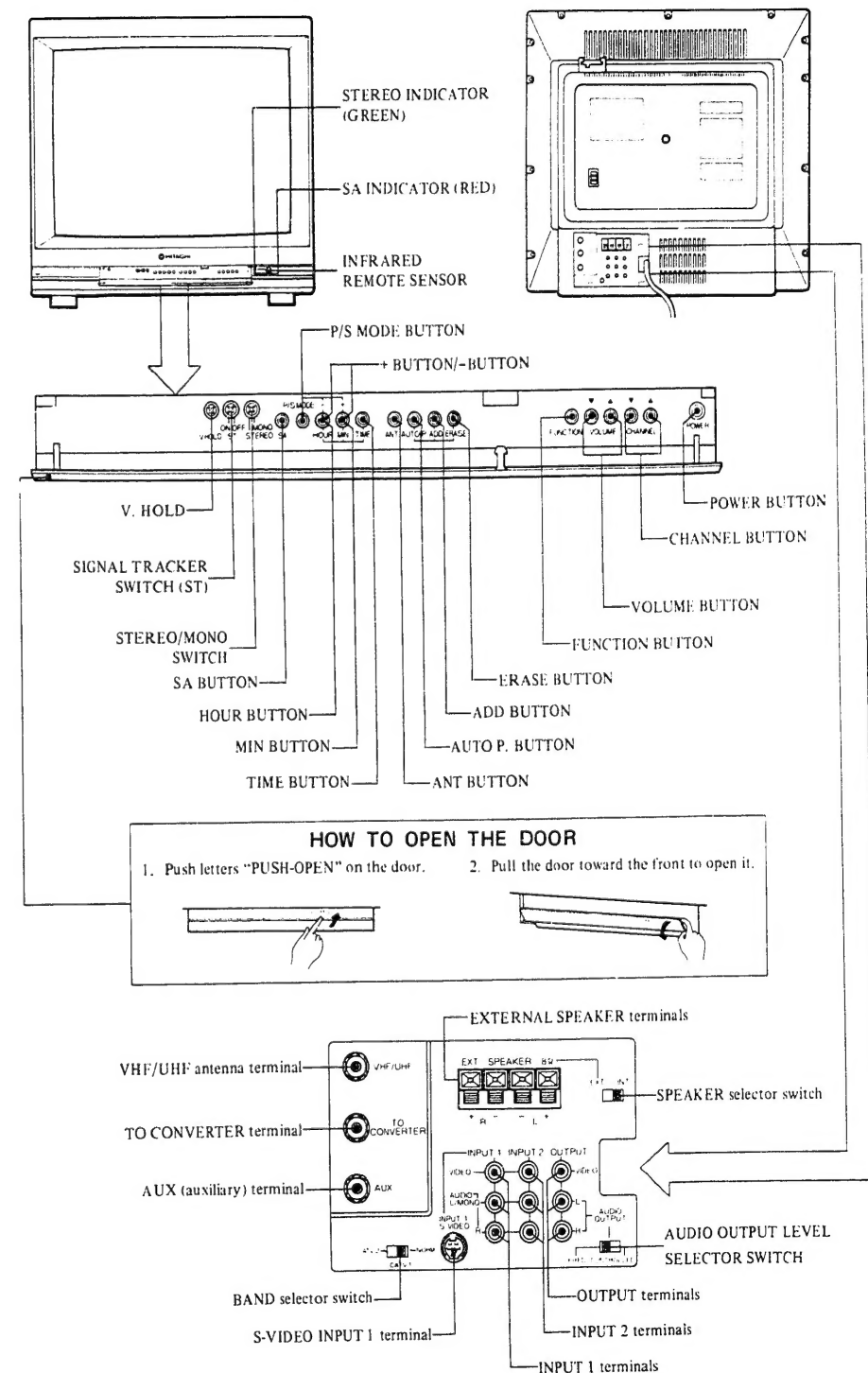


Use the voltmeter which can indicate up to the first decimal point, with an input impedance of  $10M\Omega$  or more.

Fig. 1



## LOCATION OF CONTROLS



## HOW TO SELECT CHANNELS

## STEP 1

TURNING THE SET ON — **POWER BUTTON**

Push the POWER BUTTON to turn the set ON. (To turn the set OFF, push the POWER BUTTON again.)

## STEP 2

VOLUME CONTROL — **VOLUME BUTTON**

Push the right side (▲: UP) of the VOLUME BUTTON to make the sound louder, and the left side (▼: DOWN) of the VOLUME BUTTON to make the sound softer. Variation of the volume is displayed at the upper part of the screen with numerals 0 ~ 63 and by the color bar. (Fig. 1)

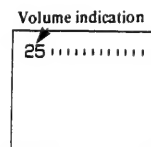


Fig. 1

## STEP 3

FUNCTION SELECTION — **FUNCTION BUTTON**

Every time you press the FUNCTION BUTTON, the set alternates between the TV mode and FUNCTION mode. To watch the TV, set to the TV mode. At this time, the channel number is displayed at the upper right of the screen. To enjoy a VCR, set to the FUNCTION mode.

## STEP 4

CHANNEL SELECTION — **CHANNEL BUTTON**

Channel selection may be performed by pressing either the CHANNEL BUTTON UP (▲) or DOWN (▼). When pressing the right side (▲: UP) of the CHANNEL BUTTON, the next higher channel is selected. And when pressing the left side (▼: DOWN) of the CHANNEL BUTTON, the next lower channel is selected. The No. of the channel to which the TV is tuned is displayed at the upper right side of the screen.

The channel No. selected is displayed for approx. 8 seconds after changing channels and disappears automatically. (The channel No. is indicated for 4 sec. in large letters, then indicated for 4 sec. in small letters, and then disappears.) (When you turn the set ON, the channel No. is displayed on the screen for approx. 15 seconds.)

Fig. 1  
Channel number indication  
Large letters  
(4 seconds)

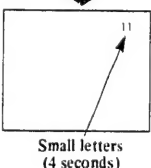
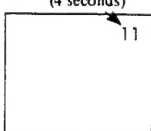


Fig. 2

## CABLE ANTENNA (CATV) OPERATION

Your TV can receive Cable Antenna (CATV) channels. (See the table "RECEPTION BAND".)  
To receive CATV channels, please operate as follows.

## STEP 1

## CATV ANTENNA CONNECTION

Connect your CATV cable to the antenna terminal board. (Refer to "ANTENNA CONNECTIONS" on page 3.)

## STEP 2

BAND SELECTION — **BAND SELECTOR SWITCH**

The BAND SELECTOR SWITCH is installed at the back of the set. Your TV can receive 12 VHF channels, 56 UHF channels and 125 CATV channels. Choose the required reception band by sliding the BAND SELECTOR SWITCH shown as in Fig. 1.

■ When shipped from the factory, this switch is set to the "NORM" position.

Set the BAND SELECTOR SWITCH on the back of the set to CATV 1 for normal CATV operation. (Fig. 2)

\*If the special channel frequencies that are known as the HRC. (Harmonically Related Carrier) system are used with your cable system, set the BAND SELECTOR SWITCH to CATV 2.

RECEPTION BAND	
NORM	CATV1 or CATV2
VHF 2 ~ 13 ch	VHF 2 ~ 13 ch Mid band A ~ I, A-5 ~ A-1 Super band J ~ W
UHF 14 ~ 69 ch	Hyper band W+1 ~ W+28 Ultra band W+29 ~ W+84

Fig. 1

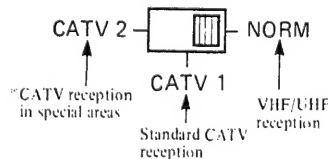


Fig. 2

## STEP 3

CHANNEL SELECTION — **CHANNEL BUTTON**

CATV channel selection can be done with the CHANNEL BUTTON UP (▲) or DOWN (▼) as with VHF/UHF channels. When receiving CATV 2 ~ 13 channels, 2 ~ 13 is indicated on the screen. When receiving Mid band channels, A ~ I, 14 ~ 22 is indicated, and when receiving Super Band channels J ~ W, 23 ~ 36 is indicated. When receiving Hyper band channels W+1 ~ W+28, 37 ~ 64 is indicated, when receiving Mid band A-5 ~ A-1, 95 ~ 99 is indicated, and when receiving Ultra band channels W+29 ~ W+58, W+59 ~ W+84, 65 ~ 94 and 100 ~ 125 is indicated.

**Note:** If the reception of certain CATV channels is poor or not possible in the CATV 1 position, set the BAND SELECTOR SWITCH to CATV 2.

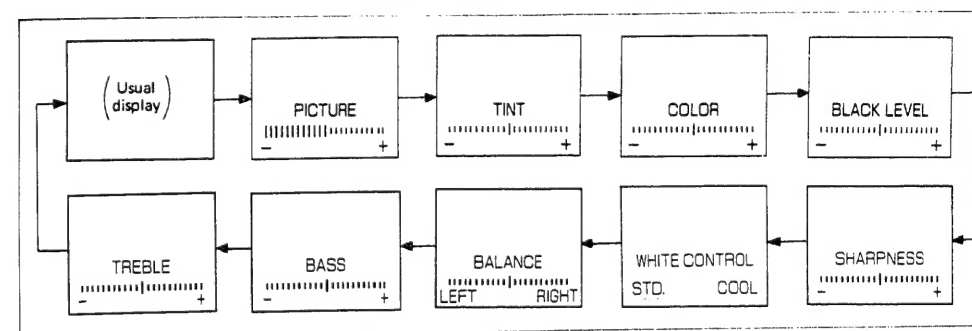
## TO OBTAIN THE BEST PICTURE AND SOUND

To control P. MODE (PICTURE, TINT, COLOR, BLACK LEVEL, SHARPNESS, WHITE CONTROL) and S. MODE (BALANCE, BASS, TREBLE), follow the instructions below.  
They are set to normal position when shipped from the factory.

## P/S MODE BUTTON

Choose the required control, as nine kinds of control will be shown in the following order every time you press the P/S MODE BUTTON.

## On-screen Display Order of P/S MODE



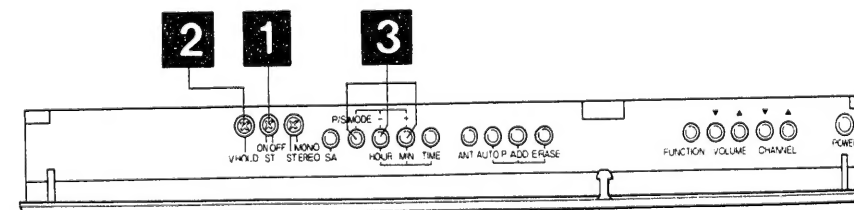
## + BUTTON/- BUTTON

Use the + and - BUTTONS for control.

When you press the + BUTTON, the cursor moves to the right, and when you press the - BUTTON, the cursor moves to the left, as the state of control is changed (as for PICTURE, the number of color bars is increased or decreased. For WHITE CONTROL, underline moves).

For best results, refer to the following OPERATION.

## OPERATION

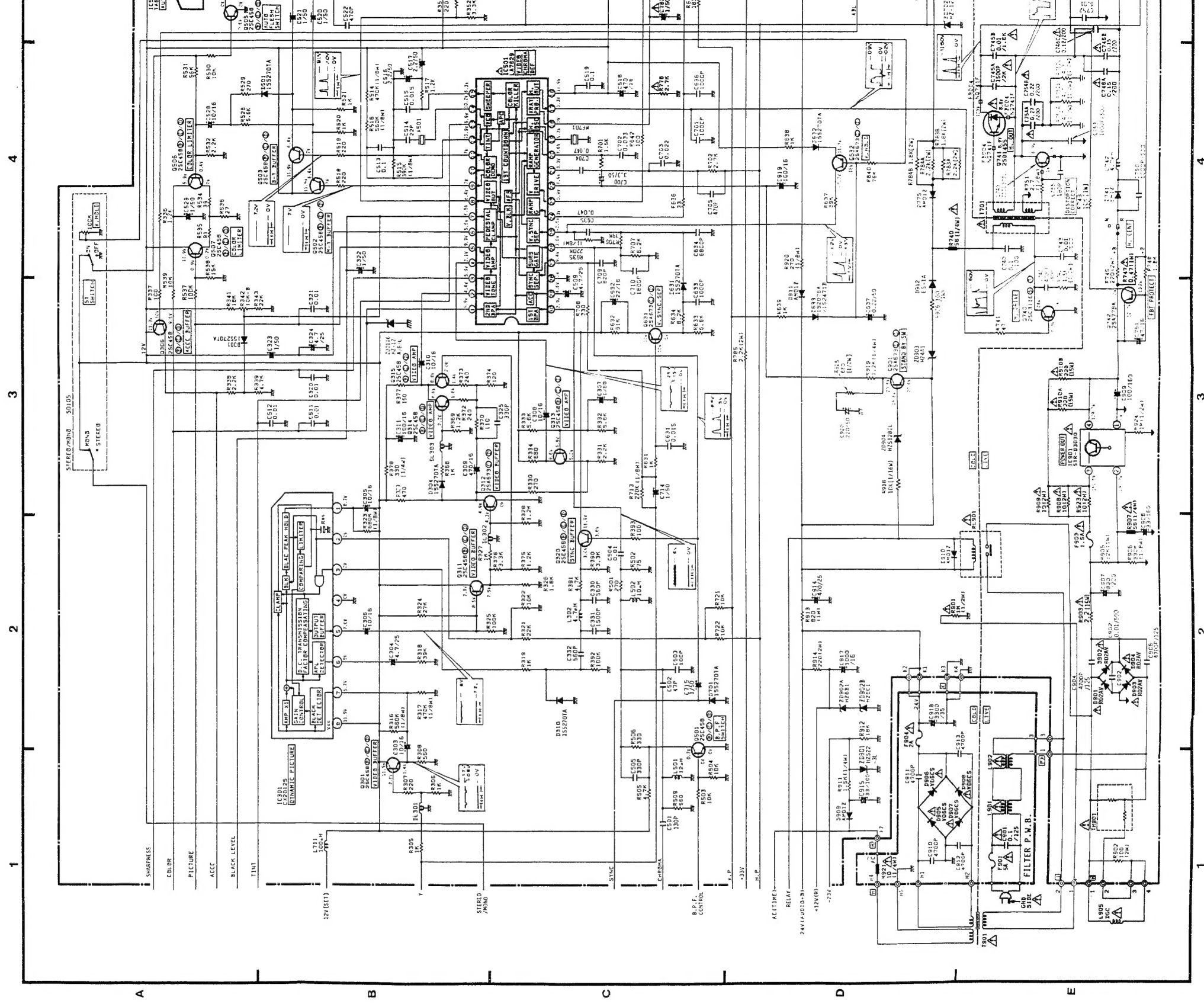


1	SIGNAL TRACKER (ST)	ST is to automatically control variation of color tone between channels. To engage ST, once turn the ST switch "OFF", then set the TINT control and COLOR control (mentioned below) to the best position, and then turn the ST switch "ON". This is the best way to obtain the best picture. But you can adjust the TINT and the COLOR to your preference even when ST is left "ON".
2	VERTICAL HOLD (V. HOLD)	If the picture moves up or down ("rolls"), adjust the Vertical Hold control until the picture stops rolling.

3	P. MODE	<b>PICTURE</b> The PICTURE control is used to adjust contrast, the black level and the color all at once. When the + button is pressed (the indicator moves to the right), the black level is increased, contrast becomes greater and the color becomes deeper.
		<b>TINT</b> When the – button is pressed (the cursor moves to the left), flesh tones will be tinted purple, and when the + button is pressed (the cursor moves to the right), they will be green. With the TINT control set at the point where flesh tones appear most real and natural, all other colors will appear normal.
		<b>COLOR</b> The COLOR control sets the intensity of colors. Set this control to where the colors appear normal in intensity and brilliance.
		<b>BLACK LEVEL</b> Set this control until the portions of the picture you know to be black appear black.
		<b>SHARPNESS</b> When the – button is pressed (the cursor moves to the left) to get a softer picture and when the + button is pressed (the cursor moves to the right) to get a sharper picture.
		<b>WHITE CONTROL</b> You can adjust the white balance (hue) of the picture to your own color preference. When shipped from the factory, this is set to “STD.”. If you prefer a bluish screen, set to “COOL”.
	S. MODE	<b>BALANCE</b> Permits adjustment of the balance of the sound from the left and right speakers.
		<b>BASS</b> Press the + Button (the cursor moves to the right) to get low frequency sound and press the – Button to cut low frequency sound.
		<b>TREBLE</b> Press the + Button (the cursor moves to the right) to get high frequency sound and press the – Button to cut high frequency sound.

- Notes:**
1. Use the VR driver in the accessory bag to adjust the ST, STEREO/MONO and V. HOLD.
  2. The P/S mode display disappears automatically after 4 seconds and press again to return to the previous P/S mode display.

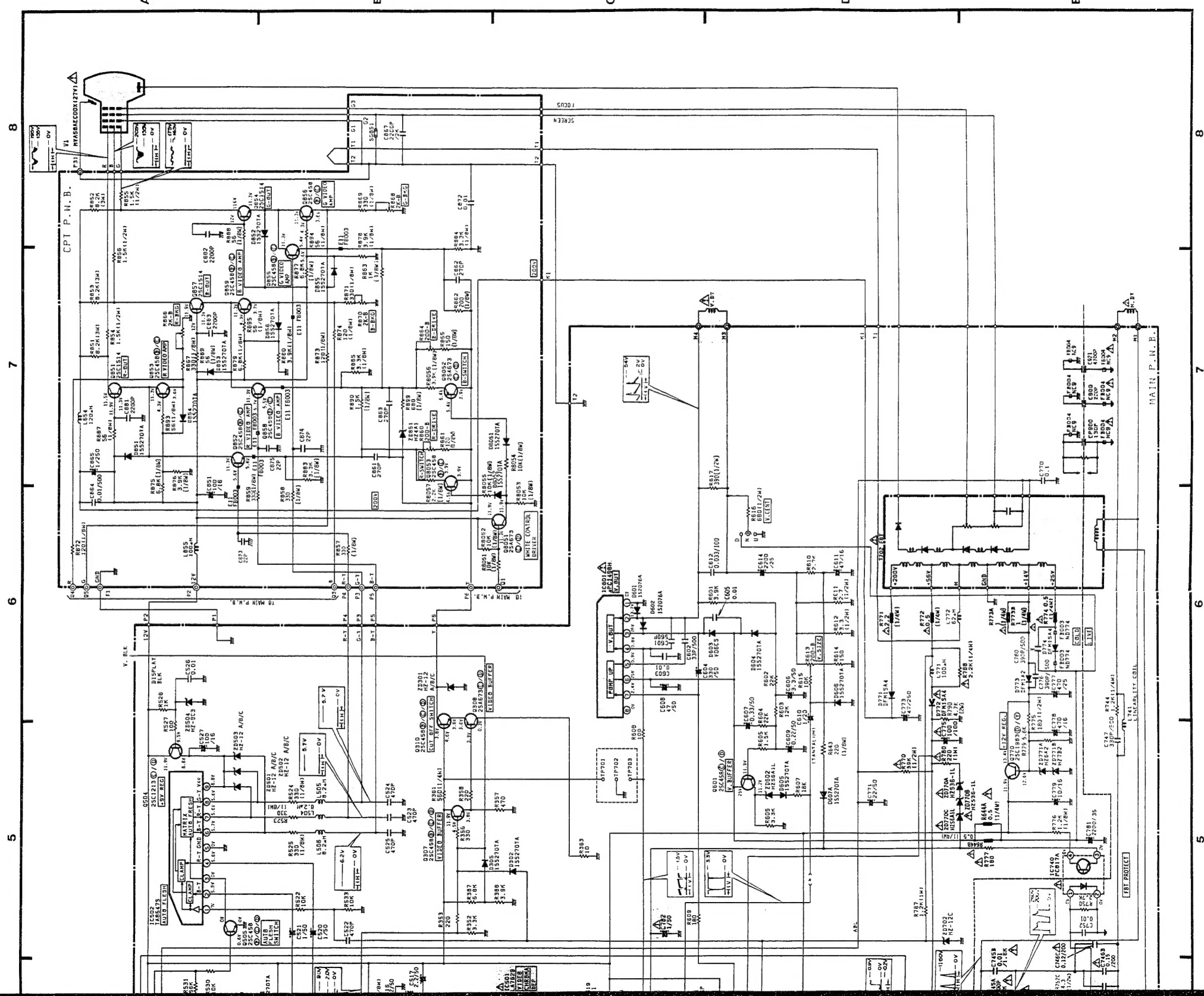
## MAIN CIRCUIT

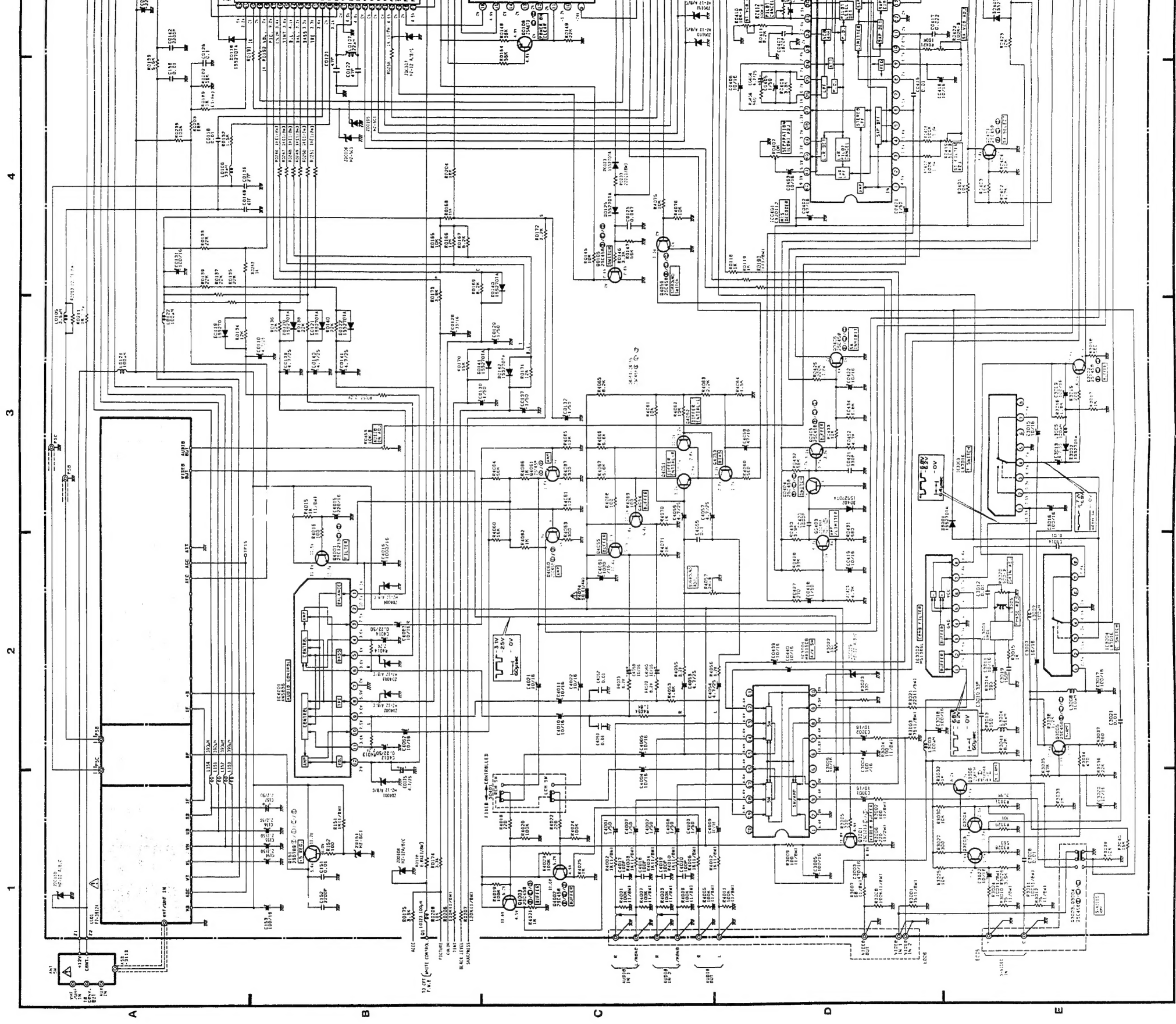


- Since this is a basic circuit diagram, the value of the parts is subject to be altered for improvement.
- All DC voltage to be measured with a tester (100k $\Omega$ /V).  
Voltage taken on a complex color bar signal including a standard color bar signal.



## CIRCUIT DIAGRAM





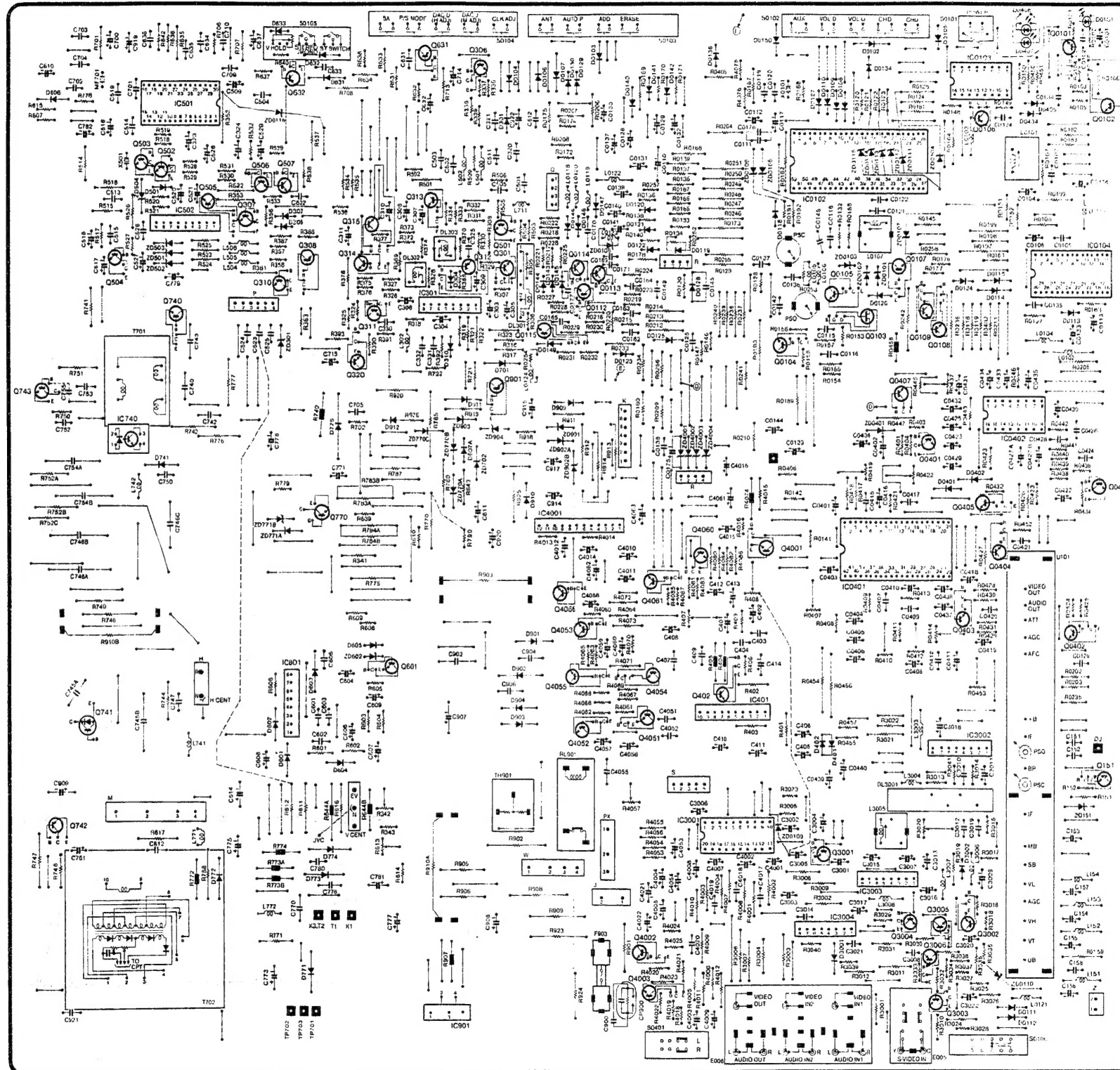




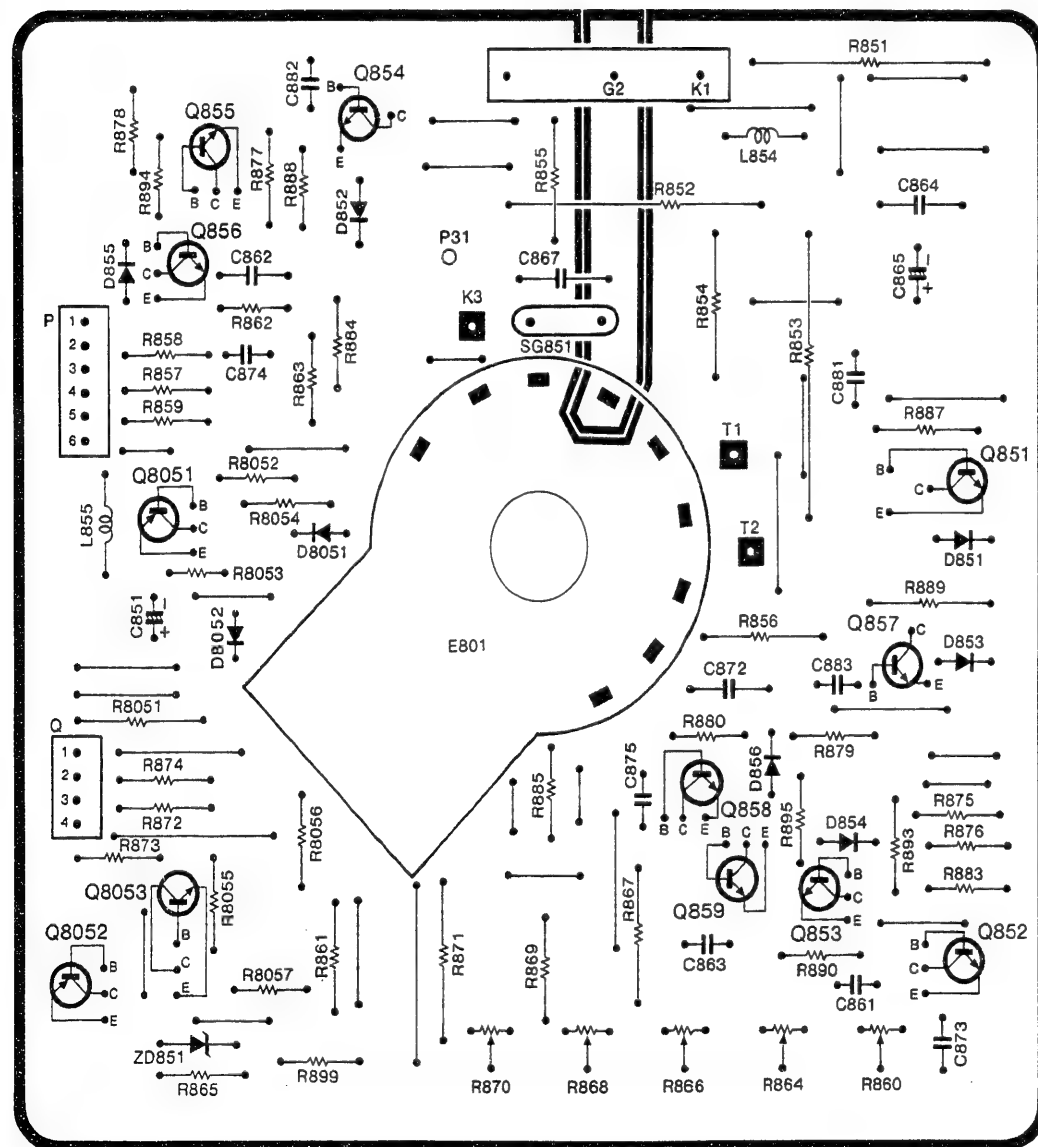
# PRINTED WIRING BOARD

CT7880B/K

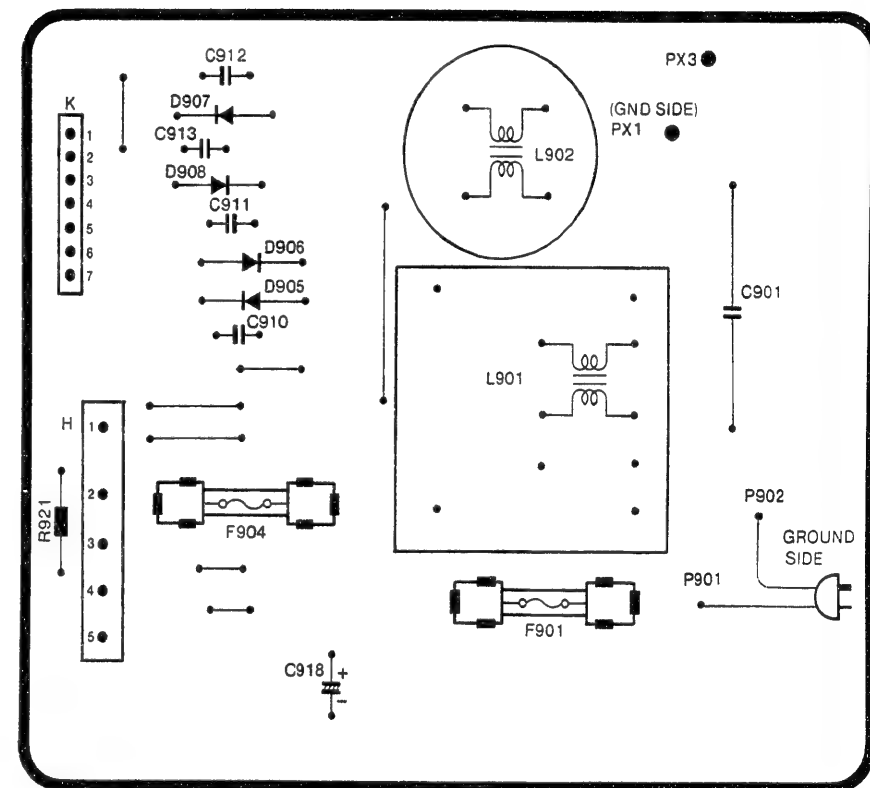
## MAIN P.W.B.



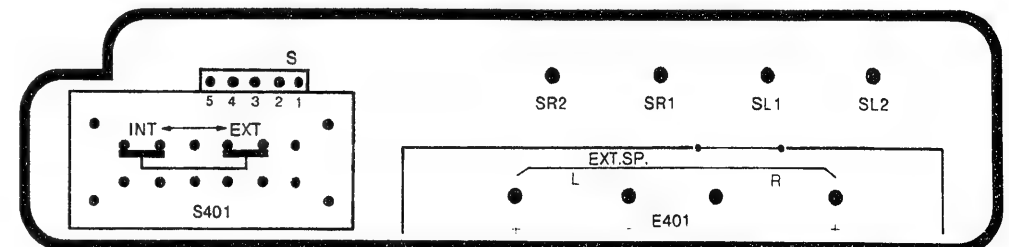
CPT P.W.B.



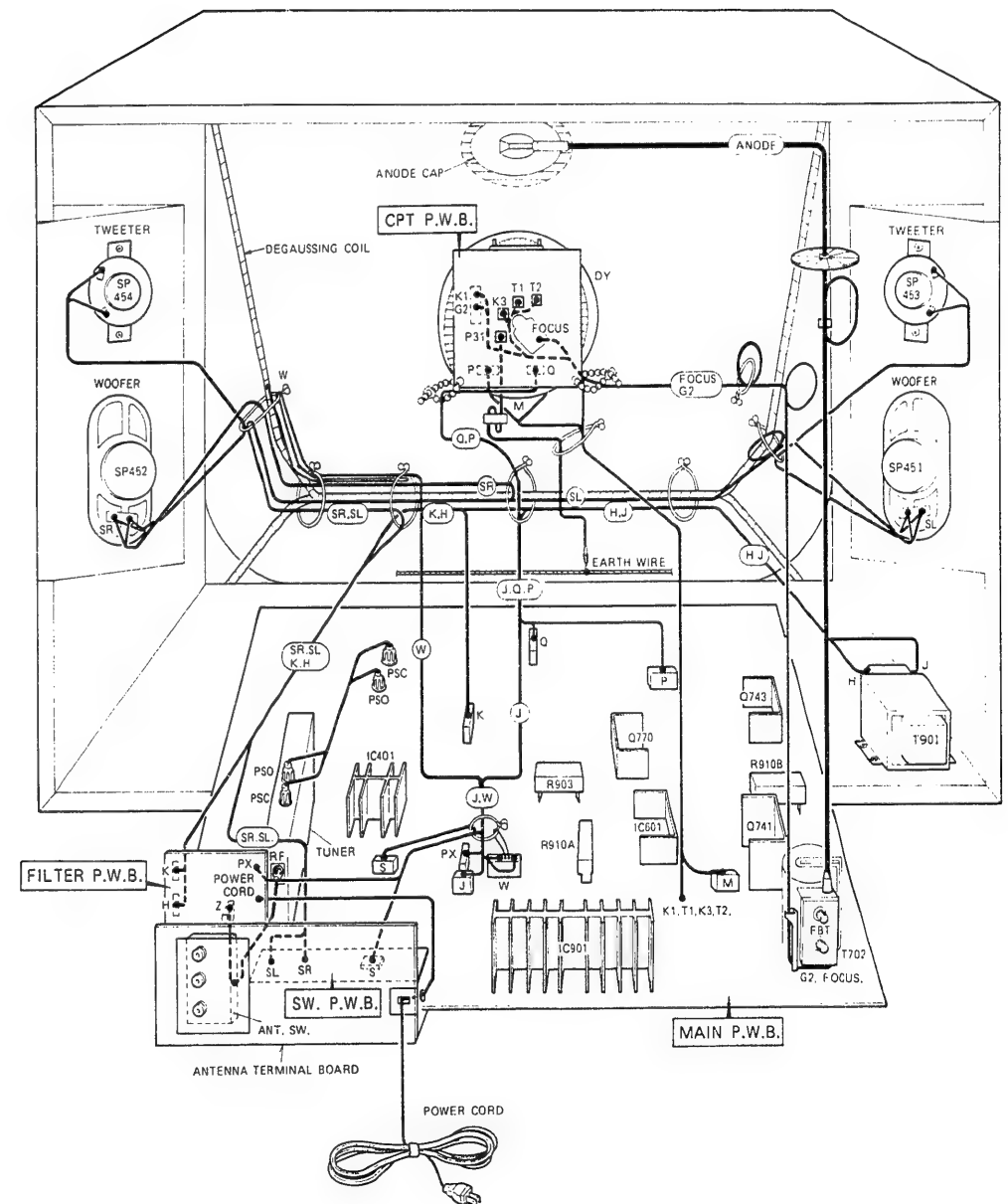
FILTER P.W.B.



SW P.W.B.



### WIRING DIAGRAM



## REPLACEMENT PARTS LIST

PRODUCT SAFETY NOTE: Components marked with a  $\Delta$  have special characteristics important to safety. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of this Service Manual. Don't degrade the safety of the receiver through improper servicing.

ABBREVIATIONS: Capacitors ..... CD: Ceramic disk, PF: Polyester film, EL: Electrolytic, PP: Polypropylene.  
Resistors ..... CF: Carbon film, CC: Carbon composition, MF: Metal oxide film,  
Semiconductor ..... TR: Transistor, DI: Diode, ZD: Zener diode  
VA: Varistor, TH: Thermistor, IC: IC

SYMBOL NO.	PARTS NO.	DESCRIPTION	SYMBOL NO.	PARTS NO.	DESCRIPTION
CAPACITORS:					
C0101	0252959	EL 4.7MF 25V	C0429	02529425	EL 10MF 16V
C0102	02441395	CD 1000PF $\pm 10\%$ , 50V	C0430	02529425	EL 220MF 16V
C0104	02529425	EL 10MF 16V	C0431	0252976	EL 3.3MF 50V
C0105	02770195	PF 0.033MF $\pm 10\%$ , 50V	C0432	0252974	EL 1MF 50V
C0106	0252959	EL 4.7MF 25V	C0433	02529425	EL 10MF 16V
C0107	0299014	PF 3600PF $\pm 2\%$ , 100V	C0434	0252975	EL 2.2MF 50V
C0110	0252959	EL 4.7MF 25V	C0435	02529425	EL 10MF 16V
C0111	02770135	PF 0.01MF $\pm 10\%$ , 50V	C0436	02529465	EL 100MF 16V
C0112	02529311	EL 470MF 10V	C0437	02529425	EL 10MF 16V
C0113	0252947	EL 220MF 16V	C0438	02529425	EL 10MF 16V
C0115	02747715	PF 0.047MF $\pm 10\%$ , 50V	C0439	02529425	EL 10MF 16V
C0116	0276345	PF 0.22MF $\pm 10\%$ , 50V	C0440	02529425	EL 10MF 16V
C0117	0252975	EL 2.2MF 50V	C151	02770135	PF 0.01MF $\pm 10\%$ , 50V
C0118	02770135	PF 0.01MF $\pm 10\%$ , 50V	C152	02441055	CD 2200PF $\pm 10\%$ , 50V
C0119	02464445	CD 15PF $\pm 5\%$ , 50V	C153	02529465	EL 100MF 16V
C0120	02464445	CD 15PF $\pm 5\%$ , 50V	C154	0252975	EL 2.2MF 50V
C0121	02464565	CD 47PF $\pm 5\%$ , 50V	C155	0252975	EL 2.2MF 50V
C0122	02464565	CD 47PF $\pm 5\%$ , 50V	C156	0252975	EL 2.2MF 50V
C0123	0252947	EL 220MF 16V	C157	0252975	EL 2.2MF 50V
C0124	02441715	CD 0.01MF $\pm 80-20\%$ , 50V	C158	02770135	PF 0.01MF $\pm 10\%$ , 50V
C0125	02747715	PF 0.047MF $\pm 10\%$ , 50V	C3001	02529425	EL 10MF 16V
C0126	0252959	EL 4.7MF 25V	C3002	02529425	EL 10MF 16V
C0127	02486925	CD 220PF $\pm 5\%$ , 50V	C3003	02529465	EL 470MF 16V
C0128	02529441	EL 33MF 16V	C3004	02529465	EL 100MF 16V
C0129	0252974	EL 1MF 50V	C3005	02529425	EL 10MF 16V
C0130	0252974	EL 1MF 50V	C3006	02529425	EL 10MF 16V
C0131	02529465	EL 100MF 16V	C3007	02529425	EL 10MF 16V
C0132	0252974	EL 1MF 50V	C3008	02770135	PF 0.01MF $\pm 10\%$ , 50V
C0133	02529425	EL 10MF 16V	C3009	02529465	EL 100MF 16V
C0134	02441055	CD 2200PF $\pm 10\%$ , 50V	C3010	02486725	CD 33PF $\pm 5\%$ , 50V
C0135	02441395	CD 1000PF $\pm 10\%$ , 50V	C3011	02529465	EL 100MF 16V
C0136	02464502	CD 27PF $\pm 5\%$ , 50V	C3012	02770135	PF 0.01MF $\pm 10\%$ , 50V
C0137	0252974	EL 1MF 50V	C3013	0252977	EL 4.7MF 50V
C0138	02747755	PF 0.1MF $\pm 10\%$ , 50V	C3014	02770135	PF 0.01MF $\pm 10\%$ , 50V
C0139	0252959	EL 4.7MF 25V	C3015	02529425	EL 10MF 16V
C0140	0252959	EL 4.7MF 25V	C3016	02529465	EL 100MF 16V
C0141	0252959	EL 4.7MF 25V	C3017	02529465	EL 100MF 16V
C0142	02441055	CD 2200PF $\pm 10\%$ , 50V	C3018	02529465	EL 100MF 16V
C0144	0252974	EL 1MF 50V	C3019	02486885	CD 150PF $\pm 5\%$ , 50V
C0145	02770095	PF 4700PF $\pm 10\%$ , 50V	C3020	02529425	EL 10MF 16V
C0148	02464565	CD 47PF $\pm 5\%$ , 50V	C3021	02770135	PF 0.01MF $\pm 10\%$ , 50V
C0149	02770135	PF 0.01MF $\pm 10\%$ , 50V	C3022	02529425	EL 10MF 16V
C0162	02486925	CD 220PF $\pm 5\%$ , 50V	C3023	02529425	EL 10MF 16V
C0163	02486925	CD 220PF $\pm 5\%$ , 50V	C3024	0252959	EL 4.7MF 25V
C0164	02486925	CD 220PF $\pm 5\%$ , 50V	C3025	02529425	EL 10MF 16V
C0165	02486925	CD 220PF $\pm 5\%$ , 50V	C3026	02529425	EL 10MF 16V
C0169	0244230	CD 220PF $\pm 10\%$ , 50V	C3027	02529425	EL 10MF 16V
C0170	0244230	CD 220PF $\pm 10\%$ , 50V	C3028	02529425	EL 10MF 16V
C0171	0244230	CD 220PF $\pm 10\%$ , 50V	C3029	02529425	EL 10MF 16V
C0174	0252976	EL 3.3MF 50V	C3030	02529425	EL 10MF 16V
C0175	0252959	EL 4.7MF 25V	C3031	02529425	EL 10MF 16V
C0176	02441055	CD 2200PF $\pm 10\%$ , 50V	C3032	02529425	EL 10MF 16V
C0177	02441395	CD 1000PF $\pm 10\%$ , 50V	C3033	02529425	EL 10MF 16V
C0401	0252974	EL 1MF 50V	C3034	02529425	EL 10MF 16V
C0402	02529465	EL 100MF 16V	C3035	02529425	EL 10MF 16V
C0403	02529425	EL 10MF 16V	C3036	02529425	EL 10MF 16V
C0404	0252959	EL 4.7MF 25V	C3037	0252974	EL 1MF 50V
C0405	0252974	EL 1MF 50V	C3038	02529425	EL 10MF 16V
C0406	02529425	EL 10MF 16V	C3039	02529425	EL 10MF 16V
C0407	0299007	PF 1800PF $\pm 2\%$ , 100V	C3040	02529425	EL 10MF 16V
C0408	0252959	EL 4.7MF 25V	C3041	02529425	EL 10MF 16V
C0409	02770195	PF 0.033MF $\pm 10\%$ , 50V	C3042	02529425	EL 10MF 16V
C0410	02529425	EL 10MF 16V	C3043	02529425	EL 10MF 16V
C0411	02529425	EL 10MF 16V	C3044	02529425	EL 10MF 16V
C0412	02441095	CD 4700PF $\pm 10\%$ , 50V	C3045	02529425	EL 10MF 16V
C0415	02770135	PF 0.01MF $\pm 10\%$ , 50V	C3046	02529425	EL 10MF 16V
C0416	02529425	EL 10MF 16V	C3047	02529425	EL 10MF 16V
C0417	02747675	PF 0.022MF $\pm 10\%$ , 50V	C3048	02529425	EL 10MF 16V
C0418	0252974	EL 1MF 50V	C3049	02529425	EL 10MF 16V
C0419	02529425	EL 10MF 16V	C3050	02529425	EL 10MF 16V
C0420	02441395	CD 1000PF $\pm 10\%$ , 50V	C3051	02529425	EL 10MF 16V
C0421	02486925	CD 330PF $\pm 5\%$ , 50V	C3052	02529425	EL 10MF 16V
C0422	02529425	EL 10MF 16V	C3053	02529425	EL 10MF 16V
C0423	02529425	EL 10MF 16V	C3054	02529425	EL 10MF 16V
C0424	0274675	PF 0.1MF $\pm 5\%$ , 50V	C3055	02529425	EL 10MF 16V
C0425	0252974	EL 1MF 50V	C3056	02529425	EL 10MF 16V
C0426	02746671	PF 0.022MF $\pm 5\%$ , 50V	C3057	02529425	EL 10MF 16V
C0427A	02529435	EL 22MF 16V	C3058	02529425	EL 10MF 16V
C0427B	02529435	EL 22MF 16V	C3059	02529425	EL 10MF 16V
C0428	02746555	PF 2200PF $\pm 5\%$ , 50V	C3060	02529425	EL 10MF 16V

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SYMBOL NO.	PARTS NO.	DESCRIPTION	SYMBOL NO.	PARTS NO.	DESCRIPTION
C405	0252910	EL 100MF 6.3V	C771	0252979	EL 22MF 50V
C4051	02770135	PF 0.01MF $\pm 10\%$ , 50V	C773	0253475	EL 47MF 250V
C4052	02770135	PF 0.01MF $\pm 10\%$ , 50V	C775	0253920	EL 100MF 100V
C4053	0252959	EL 4.7MF 25V	C776	0243508	CD 390PF $\pm 10\%$ , 500V
C4054	0252959	EL 4.7MF 25V	C777	0252967	EL 470MF 25V
C4055	02747755	PF 0.1MF $\pm 10\%$ , 50V	C778	0252949	EL 470MF 16V
C4056	0252959	EL 4.7MF 25V	C779	02529425	EL 10MF 16V
C4057	0252959	EL 4.7MF 25V	C780	0243508	CD 390PF $\pm 10\%$ , 500V
C4058	02529455	EL 47MF 16V	C781	0252934	EL 2200MF 35V
C4059	02529425	EL 10MF 16V	C782	0252974	EL 1MF 50V
C406	0252910	EL 100MF 6.3V	C851	02529465	EL 100MF 16V
C4060	02529425	EL 10MF 16V	C861	02441365	CD 270PF $\pm 10\%$ , 50V
C4061	02529501	EL 1000MF 16V	C862	02441365	CD 270PF $\pm 10\%$ , 50V
C4062	02529425	EL 10MF 16V	C863	02441365	CD 270PF $\pm 10\%$ , 50V
C4063	02529425	EL 10MF 16V	C864	02445411	CD 0.01MF $\pm 10\%$ , 500V
C407	02747755	PF 0.1MF $\pm 10\%$ , 50V	C865	0253468	EL 1MF 250V
C408	0252982	EL 100MF 50V	C867	02442155	CD 2200PF $\pm 10\%$ , 2KV
C409	02747755	PF 0.1MF $\pm 10\%$ , 50V	C872	02441415	CD 0.01MF $\pm 10\%$ , 50V
C410	0252951	EL 2200MF 16V	C873	02486685	CD 22PF $\pm 5\%$ , 50V
C411	0252951	EL 2200MF 16V	C874	02486685	CD 22PF $\pm 5\%$ , 50V
C412	02529425	EL 10MF 16V	C875	02486685	CD 22PF $\pm 5\%$ , 50V
C413	02529425	EL 10MF 16V	C881	02441055	CD 2200PF $\pm 10\%$ , 50V
C414	0252965	EL 220MF 25V	C882	02441055	CD 2200PF $\pm 10\%$ , 50V
C452	0257048	EL 10MF 16V	C883	02441055	CD 2200PF $\pm 10\%$ , 50V
C454	0257048	EL 2.2MF 25V	C900	0249389	CD 220PF $\pm 10\%$
C455	02529501	EL 1000MF 16V	C901	02797185	PF 0.1MF $\pm 10\%$ , 125V
C456	02529501	EL 1000MF 16V	C902	02445411	CD 0.01MF $\pm 10\%$ , 500V
C501	02486875	CD 130PF $\pm 5\%$ , 50V	C904	02491455	CD 4700PF $\pm 100\%$ , 125V
C502	02486765	CD 47PF $\pm 5\%$ , 50V	C906	02491455	CD 4700PF $\pm 100\%$ , 125V
C503	02486845	CD 100PF $\pm 5\%$ , 50V	C907	02599771	EL 820MF 200V
C504	02770135	PF 0.01MF $\pm 10\%$ , 50V	C908	0252779	CD 33MF 160V
C505	02486965	CD 330PF $\pm 5\%$ , 50V	C909	02585895	EL 100MF 160V
C509	0252959	EL 4.7MF 25V	C910	02441095	CD 4700PF $\pm 10\%$ , 50V
C511	02770135	PF 0.01MF $\pm 10\%$ , 50V	C911	02441095	CD 4700PF $\pm 10\%$ , 50V
C512	02770135	PF 0.01MF $\pm 10\%$ , 50V	C912	02441095	CD 4700PF $\pm 10\%$ , 50V
C513	02747755	PF 0.1MF $\pm 10\%$ , 50V	C913	02441095	CD 4700PF $\pm 10\%$ , 50V
C514	02464485	CD 22PF $\pm 5\%$ , 50V	C914	0252967	EL 470MF 25V
C515	02701655	PF 0.01MF $\pm 10\%$ , 50V	C915	0253918	EL 33MF 160V
C516	0252975	EL 2.2MF 50V	C917	02529501	EL 1000MF 16V
C517	0252975	EL 2.2MF 50V	C918	0258603	EL 3300MF 35V
C518	0252949	EL 470MF 16V	C919	02529465	EL 100MF 16V
C519	02747755	PF 0.1MF $\pm 10\%$ , 50V	C920	0252983	EL 220MF 50V
C520	0252974	EL 1MF 50V	C921	02491455	CD 4700PF $\pm 10\%$ , 50V
C521	0252974	EL 1MF 50V	RESISTORS:		
C522	02490935	CD 470PF $\pm 5\%$ , 50V	R0101	01871055	CF 47K OHM $\pm 5\%$ , 1 16W
C523	02441185	CD 470PF $\pm 10\%$ , 50V	R0102	01870755	CF 27K OHM $\pm 5\%$ , 1 16W
C524	02441185	CD 470PF $\pm 10\%$ , 50V	R0103	01870735	CF 2.2K OHM $\pm 5\%$ , 1 16W
C525	02441185	CD 470PF $\pm 10\%$ , 50V	R0104	01871055	CF 47K OHM $\pm 5\%$ , 1 16W
C526	02770135	PF 0.01MF $\pm 10\%$ , 50V	R0105	01870655	CF 1K OHM $\pm 5\%$ , 1 16W
C527	02529465	EL 100MF 16V	R0106	01001255	CF 330K OHM $\pm 5\%$ , 1 8W
C528	02529425	EL 10MF 16V	R0107	01871055	CF 47K OHM $\pm 5\%$ , 1 16W
C529	0252974	EL 1MF 50V	R0108	01871015	CF 33K OHM $\pm 5\%$ , 1 16W
C601	02441155	CD 560PF $\pm 10\%$ , 50V	R0109	01870575	CF 470 OHM $\pm 5\%$ , 1 16W
C602	02478825	CD 33PF $\pm 10\%$ , 500V	R0110	01870655	CF 1K OHM $\pm 5\%$ , 1 16W
C603	02770135	PF 0.01MF $\pm 10\%$ , 50V	R0111	01870655	CF 1K OHM <



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SYMBOL NO.	PARTS NO.	DESCRIPTION	SYMBOL NO.	PARTS NO.	DESCRIPTION
R0165	01870895	CF 10K OHM $\pm 5\%$ 1/16W	R0422	01500415	VR 100K OHM-B RS-8
R0166	01870915	CF 12K OHM $\pm 5\%$ 1/16W	R0423	01870895	CF 10K OHM $\pm 5\%$ 1/16W
R0167	01870875	CF 8.2K OHM $\pm 5\%$ 1/16W	R0424	01870895	CF 10K OHM $\pm 5\%$ 1/16W
R0168	01870935	CF 15K OHM $\pm 5\%$ 1/16W	R0425	01870815	CF 4.7K OHM $\pm 5\%$ 1/16W
R0169	01870875	CF 8.2K OHM $\pm 5\%$ 1/16W	R0426	01001215	CF 220K OHM $\pm 5\%$ 1/8W
R0170	01870935	CF 15K OHM $\pm 5\%$ 1/16W	R0427	01870515	CF 270 OHM $\pm 5\%$ 1/16W
R0171	01870915	CF 12K OHM $\pm 5\%$ 1/16W	R0428	01871015	CF 33K OHM $\pm 5\%$ 1/16W
R0172	01870735	CF 2.2K OHM $\pm 5\%$ 1/16W	R0429	01870815	CF 4.7K OHM $\pm 5\%$ 1/16W
R0173	01870915	CF 3.3K OHM $\pm 5\%$ 1/16W	R0430	01870795	CF 3.9K OHM $\pm 5\%$ 1/16W
R0174	01870775	CF 3.3K OHM $\pm 5\%$ 1/16W	R0431	01870615	CF 680 OHM $\pm 5\%$ 1/16W
R0175	01870775	CF 3.3K OHM $\pm 5\%$ 1/16W	R0432	01871075	CF 56K OHM $\pm 5\%$ 1/16W
R0176	01871135	CF 100K OHM $\pm 5\%$ 1/16W	R0433	01870915	CF 12K OHM $\pm 5\%$ 1/16W
R0177	01871135	CF 100K OHM $\pm 5\%$ 1/16W	R0434	01870855	CF 6.8K OHM $\pm 5\%$ 1/16W
R0178	01000855	CF 6.8K OHM $\pm 5\%$ 1/8W	R0436	01870521	CF 300 OHM $\pm 5\%$ 1/16W
R0181	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R0437	01500375	VR 5K OHM-B RS-8
R0182	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R0438	01870855	CF 7.5K OHM $\pm 5\%$ 1/16W
R0183	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R0439	01870855	CF 6.8K OHM $\pm 5\%$ 1/16W
R0186	01870775	CF 3.3K OHM $\pm 5\%$ 1/16W	R0440	0187054	CF 360 OHM $\pm 5\%$ 1/16W
R0187	01001175	CF 150K OHM $\pm 5\%$ 1/8W	R0441	01871015	CF 33K OHM $\pm 5\%$ 1/16W
R0188	01870615	CF 680 OHM $\pm 5\%$ 1/16W	R0442	01870675	CF 1.2K OHM $\pm 5\%$ 1/16W
R0189	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R0443	0179619	MG 560K OHM $\pm 1\%$ 1/8W
R0190	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R0445	01870975	CF 22K OHM $\pm 5\%$ 1/16W
R0191	01870655	CF 1K OHM $\pm 5\%$ 1/16W	R0446	01870715	CF 1.8K OHM $\pm 5\%$ 1/16W
R0192	01870655	CF 1K OHM $\pm 5\%$ 1/16W	R0447	01870725	CF 100 OHM $\pm 5\%$ 1/16W
R0197	01870415	CF 100 OHM $\pm 5\%$ 1/16W	R0450	01000635	CF 820 OHM $\pm 5\%$ 1/8W
R0198	01870415	CF 100 OHM $\pm 5\%$ 1/16W	R0451	01000635	CF 820 OHM $\pm 5\%$ 1/8W
R0199	01870415	CF 100 OHM $\pm 5\%$ 1/16W	R0452	01870815	CF 4.7K OHM $\pm 5\%$ 1/16W
R0202	01871075	CF 56K OHM $\pm 5\%$ 1/16W	R0453	01500385	VR 10K OHM-B RS-8
R0203	01871095	CF 68K OHM $\pm 5\%$ 1/16W	R0454	01870695	CF 1.5K OHM $\pm 5\%$ 1/16W
R0204	01870955	CF 18K OHM $\pm 5\%$ 1/16W	R0455	01870835	CF 5.6K OHM $\pm 5\%$ 1/16W
R0205	01870655	CF 1K OHM $\pm 5\%$ 1/16W	R0456	01870655	CF 5.6K OHM $\pm 5\%$ 1/16W
R0206	01001155	CF 120K OHM $\pm 5\%$ 1/8W	R0457	01870835	CF 5.6K OHM $\pm 5\%$ 1/16W
R0207	01001155	CF 120K OHM $\pm 5\%$ 1/8W	R0458	01195145	FR 10 OHM $\pm 5\%$ 1/4W
R0208	01870895	CF 10K OHM $\pm 5\%$ 1/16W	R151	01000655	CF 1K OHM $\pm 5\%$ 1/8W
R0209	01001125	CF 91K OHM $\pm 5\%$ 1/8W	R152	01870415	CF 100 OHM $\pm 5\%$ 1/16W
R0210	01870895	CF 10K OHM $\pm 5\%$ 1/16W	R3001	01000385	CF 75 OHM $\pm 5\%$ 1/8W
R0211	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3002	01000415	CF 100 OHM $\pm 5\%$ 1/8W
R0212	01870415	CF 100 OHM $\pm 5\%$ 1/16W	R3003	01000385	CF 75 OHM $\pm 5\%$ 1/8W
R0213	01870415	CF 100 OHM $\pm 5\%$ 1/16W	R3004	01000415	CF 100 OHM $\pm 5\%$ 1/8W
R0214	01870415	CF 100 OHM $\pm 5\%$ 1/16W	R3005	01870535	CF 330 OHM $\pm 5\%$ 1/16W
R0215	01870815	CF 4.7K OHM $\pm 5\%$ 1/16W	R3006	01137335	CF 220 OHM $\pm 5\%$ 1/2W
R0216	01870895	CF 10K OHM $\pm 5\%$ 1/16W	R3007	01000375	CF 68 OHM $\pm 5\%$ 1/8W
R0217	01870395	CF 82 OHM $\pm 5\%$ 1/16W	R3008	01001135	CF 100K OHM $\pm 5\%$ 1/8W
R0218	01870775	CF 3.3K OHM $\pm 5\%$ 1/16W	R3009	01000415	CF 100 OHM $\pm 5\%$ 1/8W
R0219	01870815	CF 4.7K OHM $\pm 5\%$ 1/16W	R3010	01000385	CF 75 OHM $\pm 5\%$ 1/8W
R0220	01870895	CF 10K OHM $\pm 5\%$ 1/16W	R3011	01000415	CF 100 OHM $\pm 5\%$ 1/8W
R0221	01870395	CF 82 OHM $\pm 5\%$ 1/16W	R3012	01000385	CF 75 OHM $\pm 5\%$ 1/8W
R0222	01870775	CF 3.3K OHM $\pm 5\%$ 1/16W	R3013	01870455	CF 150 OHM $\pm 5\%$ 1/16W
R0223	01870815	CF 4.7K OHM $\pm 5\%$ 1/16W	R3014	01870555	CF 390 OHM $\pm 5\%$ 1/16W
R0224	01870895	CF 10K OHM $\pm 5\%$ 1/16W	R3015	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0225	01870395	CF 82 OHM $\pm 5\%$ 1/16W	R3016	01870715	CF 1.8K OHM $\pm 5\%$ 1/16W
R0226	01870775	CF 3.3K OHM $\pm 5\%$ 1/16W	R3017	01870755	CF 1K OHM $\pm 5\%$ 1/16W
R0227	01870775	CF 3.3K OHM $\pm 5\%$ 1/16W	R3018	01870755	CF 560 OHM $\pm 5\%$ 1/16W
R0228	01870415	CF 100 OHM $\pm 5\%$ 1/16W	R3019	01870495	CF 220 OHM $\pm 5\%$ 1/16W
R0229	01870815	CF 4.7K OHM $\pm 5\%$ 1/16W	R3020	01500345	VR 500 OHM-B RS-8
R0230	01870895	CF 10K OHM $\pm 5\%$ 1/16W	R3021	01000495	CF 220 OHM $\pm 5\%$ 1/8W
R0231	01870695	CF 1.5K OHM $\pm 5\%$ 1/16W	R3022	01870535	CF 330 OHM $\pm 5\%$ 1/16W
R0232	01870835	CF 5.6K OHM $\pm 5\%$ 1/16W	R3023	01870535	CF 330 OHM $\pm 5\%$ 1/16W
R0233	01000495	CF 220 OHM $\pm 5\%$ 1/16W	R3024	01000415	CF 100 OHM $\pm 5\%$ 1/8W
R0234	01870875	CF 8.2K OHM $\pm 5\%$ 1/16W	R3025	01870895	CF 10K OHM $\pm 5\%$ 1/16W
R0235	01871135	CF 100K OHM $\pm 5\%$ 1/16W	R3026	01870795	CF 3.9K OHM $\pm 5\%$ 1/16W
R0236	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3027	01870521	CF 300 OHM $\pm 5\%$ 1/16W
R0237	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3028	01870595	CF 560 OHM $\pm 5\%$ 1/16W
R0238	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3029	01870521	CF 300 OHM $\pm 5\%$ 1/16W
R0239	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3030	01870895	CF 10K OHM $\pm 5\%$ 1/16W
R0240	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3031	01870795	CF 3.9K OHM $\pm 5\%$ 1/16W
R0241	01870655	CF 1K OHM $\pm 5\%$ 1/16W	R3032	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0242	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3033	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0243	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3034	01870575	CF 470 OHM $\pm 5\%$ 1/16W
R0244	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3035	01871055	CF 47K OHM $\pm 5\%$ 1/16W
R0245	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3036	01870975	CF 22K OHM $\pm 5\%$ 1/16W
R0246	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3037	01870595	CF 560 OHM $\pm 5\%$ 1/16W
R0247	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3038	01870675	CF 1.2K OHM $\pm 5\%$ 1/16W
R0248	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3039	01870895	CF 10K OHM $\pm 5\%$ 1/16W
R0249	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3040	01870935	CF 15K OHM $\pm 5\%$ 1/16W
R0250	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3041	01870875	CF 8.2K OHM $\pm 5\%$ 1/16W
R0251	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3042	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0252	01870655	CF 1K OHM $\pm 5\%$ 1/16W	R3043	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0253	01000495	CF 220 OHM $\pm 5\%$ 1/8W	R3044	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0254	01870415	CF 100 OHM $\pm 5\%$ 1/16W	R3045	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0255	01870415	CF 100 OHM $\pm 5\%$ 1/16W	R3046	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0256	01870415	CF 100 OHM $\pm 5\%$ 1/16W	R3047	01870455	CF 220 OHM $\pm 5\%$ 1/16W
R0257	01870735	CF 2.2K OHM $\pm 5\%$ 1/16W	R3048	01870595	CF 560 OHM $\pm 5\%$ 1/16W
R0258	01000655	CF 1K OHM $\pm 5\%$ 1/8W	R3049	01870595	CF 560 OHM $\pm 5\%$ 1/16W
R0401	01870895	CF 10K OHM $\pm 5\%$ 1/16W	R3050	01001311	CF 560K OHM $\pm 5\%$ 1/8W
R0402	01870815	CF 4.7K OHM $\pm 5\%$ 1/16W	R3051	01001295	CF 470K OHM $\pm 5\%$ 1/8W
R0403	01870935	CF 15K OHM $\pm 5\%$ 1/16W	R3052	01871035	CF 39K OHM $\pm 5\%$ 1/16W
R0404	01870815	CF 4.7K OHM $\pm 5\%$ 1/16W	R3053	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0405	01870815	CF 4.7K OHM $\pm 5\%$ 1/16W	R3054	01870975	CF 22K OHM $\pm 5\%$ 1/16W
R0406	01870975	CF 2.2K OHM $\pm 5\%$ 1/16W	R3055	01870895	CF 10K OHM $\pm 5\%$ 1/16W
R0407	01500385	VR 10K OHM-B RS-8	R3056	01001335	CF 580K OHM $\pm 5\%$ 1/8W
R0408	01870595	CF 560 OHM $\pm 5\%$ 1/16W	R3057	01870995	CF 27K OHM $\pm 5\%$ 1/16W
R0409	01870775	CF 3.3K OHM $\pm 5\%$ 1/16W	R3058	01871135	CF 100K OHM $\pm 5\%$ 1/16W
R0410	0150024	VR 10K OHM-B RS-8	R3059	01870715	CF 1.8K OHM $\pm 5\%$ 1/16W
R0411	01870875	CF 8.2K OHM $\pm 5\%$ 1/16W	R3060	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0412	0150031	VR 500K OHM-B	R3061	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0413	01870741	CF 2.4K OHM $\pm 5\%$ 1/16W	R3062	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0414	01500385	VR 10K OHM-B RS-8	R3063	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0415	0119655	MF 100K OHM 1/8W	R3064	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0416	0119655	MF 100K OHM 1/8W	R3065	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0417	0119655	MF 100K OHM 1/8W	R3066	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0418	0119655	MF 100K OHM 1/8W	R3067	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0419	0150027	VR 50K OHM-B RS-8	R3068	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R0421	01871135	CF 100K OHM $\pm 5\%$ 1/16W	R3069	01870655	CF 1K OHM $\pm 5\%$ 1/16W

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SYMBOL NO.	PARTS NO.	DESCRIPTION	SYMBOL NO.	PARTS NO.	DESCRIPTION
R337	01870415	CF 100 OHM $\pm 5\%$ 1/16W	R514	01001295	CF 470K OHM $\pm 5\%$ 1/8W
R338	01870735	CF 2.2K OHM $\pm 5\%$ 1/16W	R515	01001275	CF 390K OHM $\pm 5\%$ 1/8W
R339	01870815	CF 4.7K OHM $\pm 5\%$ 1/16W	R516	01001311	CF 560K OHM $\pm 5\%$ 1/8W
R341	01870955	CF 18K OHM $\pm 5\%$ 1/16W	R517	01870675	CF 1.2K OHM $\pm 5\%$ 1/16W
R342	01502875	VR 10K OHM-B	R518	01870495	CF 220 OHM $\pm 5\%$ 1/16W
R343	01870975	CF 22K OHM $\pm 5\%$ 1/16W	R519	01870495	CF 220 OHM $\pm 5\%$ 1/16W
R352	01870775	CF 3.3K OHM $\pm 5\%$ 1/16W	R520	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R353	01870495	CF 220 OHM $\pm 5\%$ 1/16W	R521	01870655	CF 1K OHM $\pm 5\%$ 1/16W
R356	01870535	CF 330 OHM $\pm 5\%$ 1/16W	R522	01870895	CF 10K OHM $\pm 5\%$ 1/16W
R357	01870575	CF 470 OHM $\pm 5\%$ 1/16W	R523	01000535	CF 330 OHM $\pm 5\%$ 1/8W
R358	01870495	CF 220 OHM $\pm 5\%$ 1/16W	R524	01000535	CF 330 OHM $\pm 5\%$ 1/8W
R361	01141495	CF 560 OHM $\pm 5\%$ 1/4W	R525	01000535	CF 330 OHM $\pm 5\%$ 1/8W</

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SYMBOL NO.	PARTS NO.	DESCRIPTION	SYMBOL NO.	PARTS NO.	DESCRIPTION
R8052	01000895	CF 10K OHM $\pm 5\%$ 1/8W	Q0103	2324084	TR 2SK105 (E/F)
R8053	01000895	CF 10K OHM $\pm 5\%$ 1/8W	Q0104	23206631	TR 2SC1213A (C)
R8054	01000895	CF 10K OHM $\pm 5\%$ 1/8W	Q0105	23205981	TR 2SC458 (B/C/D)
R8055	01000895	CF 10K OHM $\pm 5\%$ 1/8W	Q0106	23206375	TR 2SA673 (C/D)
R8056	01000795	CF 3.9K OHM $\pm 5\%$ 1/8W	Q0107	23205981	TR 2SC458 (B/C/D)
R8057	01000735	CF 2.2K OHM $\pm 5\%$ 1/8W	Q0108	23205981	TR 2SC458 (B/C/D)
R851	0110367	MF 8.2K OHM $\pm 5\%$ 3W	Q0109	23205981	TR 2SC458 (B/C/D)
R852	0110367	MF 8.2K OHM $\pm 5\%$ 3W	Q0112	23205981	TR 2SC458 (B/C/D)
R853	0110367	MF 8.2K OHM $\pm 5\%$ 3W	Q0113	23205981	TR 2SC458 (B/C/D)
R854	0113754	CF 1.5K OHM $\pm 5\%$ 1/2W	Q0114	23205981	TR 2SC458 (B/C/D)
R855	0113754	CF 1.5K OHM $\pm 5\%$ 1/2W	Q0115	23205981	TR 2SC458 (B/C/D)
R856	0113754	CF 1.5K OHM $\pm 5\%$ 1/2W	Q0402	23205981	TR 2SC458 (B/C/D)
R857	01000535	CF 330 OHM $\pm 5\%$ 1/8W	Q0403	23205955	TR 2SC458 (D)
R858	01000535	CF 330 OHM $\pm 5\%$ 1/8W	Q0404	23205981	TR 2SC458 (B/C/D)
R859	01000535	CF 330 OHM $\pm 5\%$ 1/8W	Q0405	23205981	TR 2SC458 (B/C/D)
R860	01500015	VR 200 OHM-B	Q0406	23205981	TR 2SC458 (B/C/D)
R861	01000435	CF 120 OHM $\pm 5\%$ 1/8W	Q0407	2320647	TR 2SC1213 (C/D)
R862	01000485	CF 200 OHM $\pm 5\%$ 1/8W	Q151	2323521	TR 2SD789 (B/C/D/E)
R863	01000655	CF 1K OHM $\pm 5\%$ 1/8W	Q3001	2320647	TR 2SC1213 (C/D)
R864	01500015	VR 200 OHM-B	Q3002	23205981	TR 2SC458 (B/C/D)
R865	01000455	CF 150 OHM $\pm 5\%$ 1/8W	Q3003	23205981	TR 2SC458 (B/C/D)
R866	01500055	VR 2K OHM-B	Q3004	23205981	TR 2SC458 (B/C/D)
R867	01000535	CF 330 OHM $\pm 5\%$ 1/8W	Q3005	23205981	TR 2SC458 (B/C/D)
R868	01500055	VR 2K OHM-B	Q3006	23213515	TR 2SA836/8440 E
R869	01000535	CF 330 OHM $\pm 5\%$ 1/8W	Q301	23205981	TR 2SC458 (B/C/D)
R870	01500055	VR 2K OHM-B	Q306	23205981	TR 2SC458 (B/C/D)
R871	01000535	CF 330 OHM $\pm 5\%$ 1/8W	Q307	23205981	TR 2SC458 (B/C/D)
R872	01000435	CF 120 OHM $\pm 5\%$ 1/8W	Q308	23206375	TR 2SA673 (C/D)
R873	01000435	CF 120 OHM $\pm 5\%$ 1/8W	Q310	23205981	TR 2SC458 (B/C/D)
R874	01000435	CF 120 OHM $\pm 5\%$ 1/8W	Q311	23205981	TR 2SC458 (B/C/D)
R875	01000855	CF 6.8K OHM $\pm 5\%$ 1/8W	Q312	23206375	TR 2SA673 (C/D)
R876	01000795	CF 3.9K OHM $\pm 5\%$ 1/8W	Q313	23205981	TR 2SC458 (B/C/D)
R877	01000855	CF 6.8K OHM $\pm 5\%$ 1/8W	Q314	23205981	TR 2SC458 (B/C/D)
R878	01000795	CF 3.9K OHM $\pm 5\%$ 1/8W	Q315	23205981	TR 2SC458 (B/C/D)
R879	01000855	CF 6.8K OHM $\pm 5\%$ 1/8W	Q320	23205981	TR 2SC458 (B/C/D)
R880	01000795	CF 3.9K OHM $\pm 5\%$ 1/8W	Q4001	2320647	TR 2SC1213 (C/D)
R883	01000775	CF 3.3K OHM $\pm 5\%$ 1/8W	Q4002	23205981	TR 2SC458 (B/C/D)
R884	01000775	CF 3.3K OHM $\pm 5\%$ 1/8W	Q4003	23205981	TR 2SC458 (B/C/D)
R885	01000775	CF 3.3K OHM $\pm 5\%$ 1/8W	Q402	23205981	TR 2SC458 (B/C/D)
R887	01000355	CF 56 OHM $\pm 5\%$ 1/8W	Q4051	23205981	TR 2SC458 (B/C/D)
R888	01000355	CF 56 OHM $\pm 5\%$ 1/8W	Q4052	23205981	TR 2SC458 (B/C/D)
R889	01000355	CF 56 OHM $\pm 5\%$ 1/8W	Q4053	23205981	TR 2SC458 (B/C/D)
R890	01000695	CF 1.5K OHM $\pm 5\%$ 1/8W	Q4054	23205981	TR 2SC458 (B/C/D)
R893	01000355	CF 56 OHM $\pm 5\%$ 1/8W	Q4055	23205981	TR 2SC458 (B/C/D)
R894	01000355	CF 56 OHM $\pm 5\%$ 1/8W	Q4056	23205981	TR 2SC458 (B/C/D)
R895	01000355	CF 56 OHM $\pm 5\%$ 1/8W	Q4060	23205955	TR 2SC458 (D)
R899	01000615	CF 680 OHM $\pm 5\%$ 1/8W	Q4061	23205955	TR 2SC458 (D)
$\Delta$ R901	0139015	CC 1M OHM $\pm 10\%$ 1/2W	Q501	23205981	TR 2SC458 (B/C/D)
R902	01102215	MF 100 OHM $\pm 5\%$ 2W	Q502	23205981	TR 2SC458 (B/C/D)
$\Delta$ R903	0141154	WW 2.2 OHM $\pm 5\%$ 15W	Q503	23205981	TR 2SC458 (B/C/D)
R905	0110171	MF 12K OHM $\pm 5\%$ 1W	Q504	2320647	TR 2SC1213 (C/D)
R906	01001255	CF 330K OHM $\pm 5\%$ 1/8W	Q505	23205981	TR 2SC458 (B/C/D)
$\Delta$ R907	01195085	FR 56 OHM $\pm 5\%$ 1/4W	Q506	23205981	TR 2SC458 (B/C/D)
$\Delta$ R908	0110197	MF 10 OHM $\pm 5\%$ 2W	Q507	23205981	TR 2SC458 (B/C/D)
$\Delta$ R909	0110197	MF 10 OHM $\pm 5\%$ 2W	Q601	23205955	TR 2SC458 (D)
$\Delta$ R910A	0141161	WW 220 OHM $\pm 5\%$ 15W	Q631	23206375	TR 2SA673 (C/D)
$\Delta$ R910B	0141161	WW 220 OHM $\pm 5\%$ 15W	Q632	23206375	TR 2SA673 (C/D)
R911	01141655	CF 1.5K OHM $\pm 5\%$ 1/4W	Q740	2326216	TR 2SC3116 (S/T)
R912	01870955	CF 18K OHM $\pm 5\%$ 1/16W	$\Delta$ Q741	23244121	TR 2SD1455
R913	01101435	MF 820 OHM $\pm 5\%$ 1W	Q742	2321112	TR 2SA778A K-02
R914	0110229	MF 220 OHM $\pm 5\%$ 2W	Q743	2322223	TR 2SC2373 L
R918	01870895	CF 10K OHM $\pm 5\%$ 1/16W	Q770	2323434	TR 2SC1983 (O/Y)
R919	01141635	CF 1.2K OHM $\pm 5\%$ 1/4W	Q8051	23206375	TR 2SA673 (C/D)
R920	01000515	CF 270 OHM $\pm 5\%$ 1/8W	Q8052	23206375	TR 2SA673 (C/D)
$\Delta$ R921	01195145	FR 10 OHM $\pm 5\%$ 1/4W	Q8053	2320591	TR 2SC458 (B/C)
$\Delta$ R923	0110197	MF 10 OHM $\pm 5\%$ 2W	Q851	23212215	TR 2SC1514
R924	0139015	CC 1M OHM $\pm 10\%$ 1/2W	Q852	2320591	TR 2SC458 (B/C)
R925	01137461	CF 680 OHM $\pm 5\%$ 1/2W	Q853	2320591	TR 2SC458 (B/C)
R926	0110121	MF 100 OHM $\pm 5\%$ 1W	Q854	23212215	TR 2SC1514
I C;			Q855	2320591	TR 2SC458 (B/C)
			Q856	2320591	TR 2SC458 (B/C)
			Q857	23212215	TR 2SC1514
			Q858	2320591	TR 2SC458 (B/C)
			Q859	2320591	TR 2SC458 (B/C)
			Q901	23206375	TR 2SA673 (C/D)
			DIODERS:		
			D0101	2338171	DI PN323BH T
			D0102	23383215	DI 1SS270TA
			D0103	23383215	DI 1SS270TA
			D0104	23383215	DI 1SS270TA
			D0105	23383215	DI 1SS270TA
			D0106	23383215	DI 1SS270TA
			D0107	23383215	DI 1SS270TA
			D0108	23383215	DI 1SS270TA
			D0109	23383215	DI 1SS270TA
			D0110	23383215	DI 1SS270TA
			D0111	23383215	DI 1SS270TA
			D0112	23383215	DI 1SS270TA
			D0113	23383215	DI 1SS270TA
			D0114	23383215	DI 1SS270TA
			D0115	23383215	DI 1SS270TA
			D0118	23383215	DI 1SS270TA
			TRANSISTORS:		
Q0101	23205981	TR 2SC458 (B/C/D)			
Q0102	23205981	TR 2SC458 (B/C/D)			

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SYMBOL NO.	PARTS NO.	DESCRIPTION	SYMBOL NO.	PARTS NO.	DESCRIPTION
D0119	23383215	DI 1SS270	ZD4003	23311545	ZD HZ 12 (A B C)
D0120	23383215	DI 1SS270TA	ZD4004	23311545	ZD HZ 12 (A B C)
D0121	23383215	DI 1SS270TA	ZD501	23311545	ZD HZ 12 (A B C)
D0122	23383215	DI 1SS270TA	ZD502	23311545	ZD HZ 12 (A B C)
D0123	23383215	DI 1SS270TA	ZD503	23311545	ZD HZ 12 (A B C)
D0124	23383215	DI 1SS270TA	ZD504	2331829	ZD HZ 9C3
D0125	23383215	DI 1SS270TA	ZD602	2339011	ZD HZ56A 1L
D0126	23383215	DI 1SS270TA	ZD702	23311555	ZD HZ 12C
D0127	23383215	DI 1SS270TA	Δ ZD770A	2339251	ZD HZ536 1L
D0128	23302565	DI V06CS	Δ ZD770B	2339251	ZD HZ536 1L
D0129	23383215	DI 1SS270TA	Δ ZD770C	2339011	ZD HZ56A 1L
D0130	23383215	DI 1SS270TA	ZD771A	2331802	ZD HZ 6A 2
D0134	23383215	DI 1SS270TA	ZD771B	23318151	ZD HZ 7B 2
D0136	23383215	DI 1SS270TA	ZD851	2331781	ZD HZ 4A1
D0140	23383215	DI 1SS270TA	ZD901	2339203	ZD HZ522 3L
D0141	23383215	DI 1SS270TA	ZD902A	2331804	ZD HZ 6B1
D0142	23383215	DI 1SS270TA	ZD902B	23318075	ZD HZ 6C1
D0143	23383215	DI 1SS270TA	ZD903	2331781	ZD HZ4A1
D0144	23383215	DI 1SS270TA	ZD904	2339142	ZD HZ512B 2L
D0145	23383215	DI 1SS270			
D0146	23383215	DI 1SS270TA			
D0147	23383215	DI 1SS270TA			
D0148	23383215	DI 1SS270TA			
D0149	23383215	DI 1SS270TA			
D0150	23383215	DI 1SS270TA			
D0401	23383215	DI 1SS270TA			
D0402	23383215	DI 1SS270TA			
D0404	23383215	DI 1SS270TA			
D0405	23383215	DI 1SS270TA			
D0406	2334672	DI SLC 26			
D0407	2334671	DI SLC 26UR14			
D3001	23383215	DI 1SS270TA			
D3002	23383215	DI 1SS270TA			
D301	23383215	DI 1SS270TA			
D302	23383215	DI 1SS270TA			
D304	23383215	DI 1SS270TA			
D305	23383215	DI 1SS270TA			
D310	23383215	DI 1SS270TA			
D401	2330353	DI 1S2076A			
D402	2330353	DI 1S2076A			
D501	23383215	DI 1SS270TA			
D601	23303525	DI 1S2076A			
D602	23303525	DI 1S2076A			
D603	23302565	DI 1SS270TA			
D604	23383215	DI 1SS270TA			
D605	23383215	DI 1SS270TA			
D606	23383215	DI 1SS270TA			
D607A	23383215	DI 1SS270TA			
D631	23383215	DI 1SS270TA			
D632	23383215	DI 1SS270TA			
D633	2330353	DI 1S2076A			
D701	23383215	DI 1SS270TA			
D741	2332851	DI EH1Z			
D771	2338902	DI DFM15A4			
Δ D772	2338902	DI DFM15A4			
D773	2338161	DI DFM1A2			
D774	2338902	DI DFM15A4			
D775	23394915	DI AMO1Z			
D8051	23383215	DI 1SS270TA			
D8052	23383215	DI 1SS270TA			
D851	23383215	DI 1SS270TA			
D852	23383215	DI 1SS270TA			
D853	23383215	DI 1SS270TA			
D854	23383215	DI 1SS270TA			
D855	23383215	DI 1SS270TA			
D856	23383215	DI 1SS270TA			
Δ D901	23319911	DI RO2A V			
Δ D902	23319911	DI RO2A V			
Δ D903	23319911	DI RO2A V			
Δ D904	23319911	DI RO2A V			
Δ D905	23302565	DI V06CS			
Δ D906	23302565	DI V06CS			
Δ D907	23302565	DI V06CS			
Δ D908	23302565	DI V06CS			
D909	23394915	DI AMO1Z			
D910	23394915	DI AMO1Z			
D911	23394915	DI AMO1Z			
D912	2334581	DI ES-1A			
ZD0101	23311545	ZD HZ-12 (A B C)			
ZD0102	23311545	ZD HZ-12 (A B C)			
ZD0103	23311545	ZD HZ-12 (A B C)			
ZD0104	23311545	ZD HZ-12 (A B C)			
ZD0105	23317975	ZD HZ-5 (C)1			
ZD0106	23317975	ZD HZ-5 (C)1			
ZD0107	23311545	ZD HZ 12 (A/B C)			
ZD0108	23311545	ZD HZ 12 (A/B C)			
ZD0109	23311545	ZD HZ 12 (A/B C)			
ZD0110	23311545	ZD HZ 12 (A/B C)			
ZD0111	23311545	ZD HZ 12 (A/B C)			
ZD0112	23311545	ZD HZ 12 (A/B C)			
ZD0113	23311545	ZD HZ-12 (A/B C)			
ZD0114	23311545	ZD HZ-12 (A/B C)			
ZD0115	23311545	ZD HZ-12 (A/B C)			
ZD0116	23311545	ZD HZ 12 (A/B C)			
ZD0401	2331831	ZD HZ 11A1			
ZD151	23318075	ZD HZ-12 (A/B C)			
ZD301	23311545	ZD HZ-12 (A/B C)			
ZD4001	23311545	ZD HZ-12 (A/B C)			
ZD4002	23311545	ZD HZ-12 (A/B C)			

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SYMBOL NO.	PARTS NO.	DESCRIPTION	SYMBOL NO.	PARTS NO.	DESCRIPTION
FUSES;					
ΔF901	2721053	UL FUSE 5A			
ΔF903	2720819	FUSE 1.5A			
ΔF904	27208141	FUSE 2A			
MISCELLANEOUS;					
	87816461	4×16 TAPPING SCREW			
	8781638	4×8 TAPPING SCREW			
	4517801	6 FLANGE NUT			
	3118841	CABINET ASS'Y (OAK) (HCPA)			
	3810441	DOOR-VR(OAK)			
	3810442	DOOR-VR (BLACK)			
	3785043	PUSH LOCK A			
	4137976	4×20 TAPPING SCREW WITH WASHER			
	4519503	3×12 TAPPING SCREW			
	41594235	M3×12 SCREW W. WASHER			
	41379755	4×16 ZA R SCREW			
	41307115	NUT-4U NUT			
	47707721	3 NUT			
	3727972	HOLDER-AC LINE CORD			
	2426674	ASB-311D			
	2661751	PLUG PIN WITH BASE			
	2661751	PLUG PIN WITH BASE			
	26617525	PLUG PIN			
	26638245	CONNECTOR			
	26617525	PLUG PIN			
	26617535	PIN PLUG WITH BASE			
	2983121	SOCKET WITH SWITCH			
	2771891	FERRITE BEADS CORE 003			
	27718931	FERRITE BEADS CORE			
	2982471	300-75 VHF ADAPTER			
	2970611	REMOTE CONTROL TRANSMITTER			
	2443081	DEFLECTION YOKE			
	2771461	MAGNET			
	2773671	CF MAGNET			
	2953102	CRT SOCKET			
	2771892	FERRITE BEADS CORD 004			
	27202215	FUSE HOLDER			
	27202215	FUSE HOLDER			
	27843425	CONDENSER COVER			
	27202215	FUSE HOLDER			
	2742553	AC CORD			
	37722015	AC CORD HOLDER			
	2667422	MINI CONNECTOR WITH WIRE			
	2667422	MINI CONNECTOR WITH WIRE			
	27718925	FERRITE BEADS CORE 004			
	27718925	FERRITE BEADS CORE 004			
	2771891	FERRITE BEADS CORE 003			
	88212341	3 NUT			
	88131241	WASHER			
	27862815	MICA SHEET			
	27863015	TRS SHEET			
	27718925	FERRITE BEADS CORE 004			
	4241091	HEAT SINK			
	87114082	SCREW			
	88212341	3 NUT			
	88131241	WASHER			
	87114082	SCREW			
	88131241	WASHER			
	3731081	PURSE LOCK			
	2788841	ANODE CLAMP			
	3794331	PRESET DRIVER			
	4520883	M3×12 SCREW WITH WASHER			
	46156411	WEDGE			
	4520881	M3×8 SCREW (WITH WASHER)			
	33309415	EARTH SPRING			
	37637515	SK BINDER			
	4520883	M3×12 SCREW WITH WASHER			
	88211141	M3 NUT			
	41594235	M3×12 SCREW W. WASHER			
	4520883	M3×12 SCREW WITH WASHER			
	2632923	TACT SWITCH			
	2633171	TACT SWITCH			
	2633172	TACT SWITCH			
	2633171	TACT SWITCH			
	0150711	VR 3-GANGED WITH SWITCH			
	2620801	SLIDE SWITCH			
	2620973	SLIDE SWITCH			
	2620791	SLIDE SWITCH			
	23400375	SPARK GAP			
	2412642	SPEAKER			
	2412642	SPEAKER			
	2411913	SPEAKER 50MM			
	2411913	SPEAKER 50MM			
	2427401	F7-3812K			
	2358201	CRT MVA68AECOOX (HCPA)			
	2787521	CRYSTAL			
	2790441	CRYSTAL			
	2640336	RELAY			
	3461841	BACK COVER ASS'Y (HCPA)			



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